



SPEC CPU®2017 Floating Point Speed Result

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Supermicro

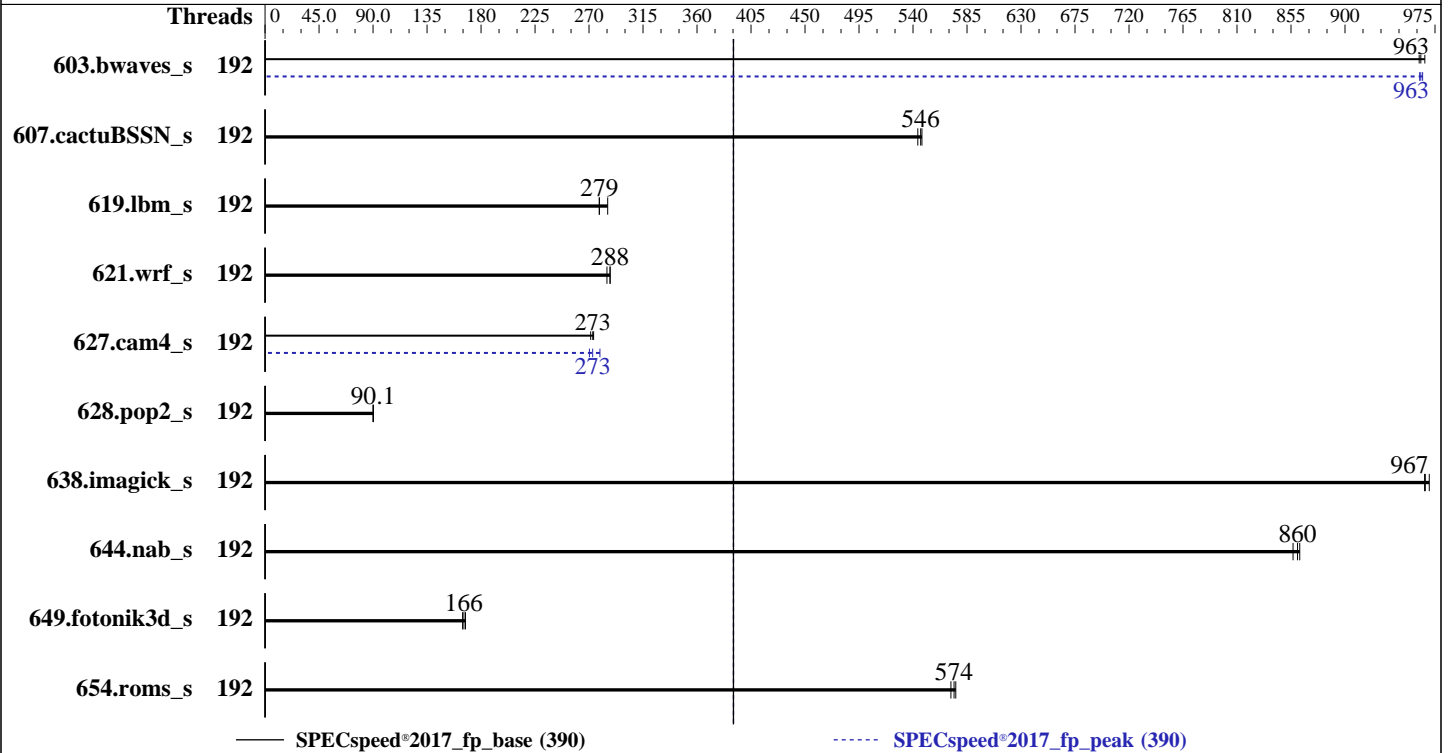
SuperServer SYS-112HA-TN
(X14SBH-AP , Intel Xeon 6970E+)

SPECspeed®2017_fp_base = 390

SPECspeed®2017_fp_peak = 390

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: May-2026
Hardware Availability: Jun-2026
Software Availability: Apr-2026



Hardware

CPU Name: Intel Xeon 6970E+
Max MHz: 3200
Nominal: 2300
Enabled: 192 cores, 1 chip
Orderable: 1 chip
Cache L1: 64 KB I + 32 KB D on chip per core
L2: 192 MB I+D on chip per chip, 4 MB shared / 4 cores
L3: 480 MB I+D on chip per chip
Other: None
Memory: 1152 GB (12 x 96 GB 2Rx4 PC5-8000B-R)
Storage: 1 x 480 GB NVMe SSD
Other: CPU Cooling: Air

Software

OS: Red Hat Enterprise Linux 9.7
Kernel 5.14.0-611.5.1.el9_7.x86_64
Compiler: C/C++: Version 2026.0 of Intel oneAPI DPC++/C++ Compiler for Linux;
Fortran: Version 2026.0 of Intel Fortran Compiler for Linux;
Parallel: Yes
Firmware: Version 1.5b released May-2026
File System: xfs
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other: jemalloc memory allocator V5.0.1
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage.



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Results Table

Benchmark	Base						Peak							
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	192	61.3	963	61.3	962	61.0	967	192	61.3	962	61.3	963	61.2	965
607.cactuBSSN_s	192	30.6	544	30.5	547	30.5	546	192	30.6	544	30.5	547	30.5	546
619.lbm_s	192	18.8	279	18.3	286	18.8	279	192	18.8	279	18.3	286	18.8	279
621.wrf_s	192	46.4	285	46.0	288	46.0	288	192	46.4	285	46.0	288	46.0	288
627.cam4_s	192	32.4	274	32.7	271	32.5	273	192	32.8	270	31.8	279	32.5	273
628.pop2_s	192	132	90.1	132	90.2	132	90.1	192	132	90.1	132	90.2	132	90.1
638.imagick_s	192	14.9	966	14.9	967	14.9	970	192	14.9	966	14.9	967	14.9	970
644.nab_s	192	20.4	857	20.3	860	20.3	862	192	20.4	857	20.3	860	20.3	862
649.fotonik3d_s	192	54.6	167	55.4	165	55.0	166	192	54.6	167	55.4	165	55.0	166
654.roms_s	192	27.4	574	27.4	576	27.5	572	192	27.4	574	27.4	576	27.5	572

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Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
KMP_AFFINITY = "granularity=fine,compact,1,0"
LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64"
MALLOCONF = "retain:true"
OMP_STACKSIZE = "192M"

General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM
memory using Redhat Enterprise Linux 8.0
Transparent Huge Pages enabled by default
Prior to runcpu invocation
Filesystem page cache synced and cleared with:
sync; echo 3> /proc/sys/vm/drop_caches

NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5753 (Spectre variant 1) is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5715 (Spectre variant 2) is mitigated in the system as tested and documented.
jemalloc, a general purpose malloc implementation
built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5
sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>



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Platform Notes

BIOS settings:
Workload Profile = HPC
KTI Prefetch = Enable
Stale AtoS = Disable
LLC Dead Line Alloc = Disable

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on 135-179-165.engtw Thu May 28 13:39:46 2026

SUT (System Under Test) info as seen by some common utilities.

Table of contents

1. uname -a
2. w
3. Username
4. ulimit -a
5. sysinfo process ancestry
6. /proc/cpuinfo
7. lscpu
8. numactl --hardware
9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 252 (252-55.el9)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. tuned-adm active
16. sysctl
17. /sys/kernel/mm/transparent_hugepage
18. /sys/kernel/mm/transparent_hugepage/khugepaged
19. OS release
20. Disk information
21. /sys/devices/virtual/dmi/id
22. dmidecode
23. BIOS

1. uname -a
Linux 135-179-165.engtw 5.14.0-611.5.1.el9_7.x86_64 #1 SMP PREEMPT_DYNAMIC Fri Oct 17 14:16:35 EDT 2025
x86_64 x86_64 x86_64 GNU/Linux

2. w
13:39:46 up 19:28, 1 user, load average: 5.70, 6.32, 3.69
USER TTY LOGIN@ IDLE JCPU PCPU WHAT
root tty1 Wed18 19:25m 1.03s 0.00s -bash

3. Username
From environment variable \$USER: root

4. ulimit -a
real-time non-blocking time (microseconds, -R) unlimited
core file size (blocks, -c) 0
data seg size (kbytes, -d) unlimited

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Platform Notes (Continued)

```

scheduling priority          (-e) 0
file size                    (blocks, -f) unlimited
pending signals              (-i) 4640390
max locked memory           (kbytes, -l) 64
max memory size              (kbytes, -m) unlimited
open files                   (-n) 1024
pipe size                    (512 bytes, -p) 8
POSIX message queues         (bytes, -q) 819200
real-time priority          (-r) 0
stack size                   (kbytes, -s) unlimited
cpu time                     (seconds, -t) unlimited
max user processes           (-u) 4640390
virtual memory               (kbytes, -v) unlimited
file locks                   (-x) unlimited

```

```

-----
5. sysinfo process ancestry
/usr/lib/systemd/systemd rhgb --switched-root --system --deserialize 31
login -- root
-bash
-bash
runcpu --nobuild --action validate --define default-platform-flags -c
ic2026.0-lin-clearwaterforest-speed-20260429.cfg --define cores=192 --tune base,peak -o all --define
smt-on --define drop_caches fpspeed
runcpu --nobuild --action validate --define default-platform-flags --configfile
ic2026.0-lin-clearwaterforest-speed-20260429.cfg --define cores=192 --tune base,peak --output_format all
--define smt-on --define drop_caches --nopower --runmode speed --tune base:peak --size refspeed fpspeed
--nopreenv --note-preenv --logfile $SPEC/tmp/CPU2017.004/temlogs/preenv.fpspeed.004.0.log --lognum 004.0
--from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017

```

```

-----
6. /proc/cpuinfo
model name      : Intel(R) Xeon(R) 6970E+
vendor_id      : GenuineIntel
cpu family     : 6
model          : 221
stepping       : 1
microcode      : 0x1000120
bugs           : spectre_v1 spectre_v2 spec_store_bypass swappgs bhi spectre_v2_user
cpu cores     : 192
siblings      : 192
1 physical ids (chips)
192 processors (hardware threads)
physical id 0: core ids 0-63,128-191,256-319
physical id 0: apicids
0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,64,66,68,70,72
,74,76,78,80,82,84,86,88,90,92,94,96,98,100,102,104,106,108,110,112,114,116,118,120,122,124,126,256,258,2
60,262,264,266,268,270,272,274,276,278,280,282,284,286,288,290,292,294,296,298,300,302,304,306,308,310,31
2,314,316,318,320,322,324,326,328,330,332,334,336,338,340,342,344,346,348,350,352,354,356,358,360,362,364
,366,368,370,372,374,376,378,380,382,512,514,516,518,520,522,524,526,528,530,532,534,536,538,540,542,544,
546,548,550,552,554,556,558,560,562,564,566,568,570,572,574,576,578,580,582,584,586,588,590,592,594,596,5
98,600,602,604,606,608,610,612,614,616,618,620,622,624,626,628,630,632,634,636,638
Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for
virtualized systems. Use the above data carefully.

```

7. lscpu

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Platform Notes (Continued)

From lscpu from util-linux 2.37.4:

```

Architecture:                x86_64
CPU op-mode(s):              32-bit, 64-bit
Address sizes:                52 bits physical, 48 bits virtual
Byte Order:                   Little Endian
CPU(s):                       192
On-line CPU(s) list:         0-191
Vendor ID:                    GenuineIntel
BIOS Vendor ID:              Intel(R) Corporation
Model name:                   Intel(R) Xeon(R) 6970E+
BIOS Model name:              Intel(R) Xeon(R) 6970E+
CPU family:                   6
Model:                        221
Thread(s) per core:          1
Core(s) per socket:          192
Socket(s):                    1
Stepping:                     1
BogoMIPS:                     4600.00
Flags:                        fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat
                               pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx
                               pdpe1gb rdtscp lm constant_tsc art arch_perfmon bts rep_good nopl
                               xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni
                               pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma
                               cx16 xtpr pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt
                               tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm
                               3dnowprefetch cpuid_fault epb cat_l3 cat_l2 cdp_l3 intel_ppin
                               cdp_l2 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow
                               flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep
                               bmi2 erms invpcid cqm rdt_a rdseed adx smap clflushopt clwb
                               intel_pt sha_ni xsaveopt xsavec xgetbv1 xsaves cqm_llc
                               cqm_occup_llc cqm_mbm_total cqm_mbm_local split_lock_detect
                               user_shstk avx_vnni lam wbnoinvd dtherm ida arat pln pts vnmi umip
                               pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid bus_lock_detect
                               cldemote movdiri movdir64b enqcmd fsrm md_clear serialize pconfig
                               arch_lbr ibt flush_lld arch_capabilities
Virtualization:              VT-x
L1d cache:                   6 MiB (192 instances)
L1i cache:                   12 MiB (192 instances)
L2 cache:                     192 MiB (48 instances)
L3 cache:                     480 MiB (1 instance)
NUMA node(s):                3
NUMA node0 CPU(s):           0-63
NUMA node1 CPU(s):           64-127
NUMA node2 CPU(s):           128-191
Vulnerability Gather data sampling: Not affected
Vulnerability Indirect target selection: Not affected
Vulnerability Itlb multihit: Not affected
Vulnerability L1tf:          Not affected
Vulnerability Mds:           Not affected
Vulnerability Meltdown:      Not affected
Vulnerability Mmio stale data: Not affected
Vulnerability Reg file data sampling: Not affected
Vulnerability Retbleed:      Not affected
Vulnerability Spec rstack overflow: Not affected
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
Vulnerability Spectre v1:    Mitigation; usercopy/swapgs barriers and __user pointer sanitization
Vulnerability Spectre v2:    Mitigation; Enhanced / Automatic IBRS; IBPB conditional; PBRSE-eIBRS Not affected; BHI BHI_DIS_S
Vulnerability Srbds:         Not affected

```

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Platform Notes (Continued)

Vulnerability Tsa: Not affected
Vulnerability Tsx async abort: Not affected

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	32K	6M	8	Data	1	64	1	64
L1i	64K	12M	8	Instruction	1	128	1	64
L2	4M	192M	16	Unified	2	4096	1	64
L3	480M	480M	16	Unified	3	491520	1	64

8. numactl --hardware

NOTE: a numactl 'node' might or might not correspond to a physical chip.

```

available: 3 nodes (0-2)
node 0 cpus: 0-63
node 0 size: 386111 MB
node 0 free: 383460 MB
node 1 cpus: 64-127
node 1 size: 387055 MB
node 1 free: 378617 MB
node 2 cpus: 128-191
node 2 size: 386994 MB
node 2 free: 385500 MB
node distances:
node    0    1    2
  0:   10   15   17
  1:   15   10   15
  2:   17   15   10

```

9. /proc/meminfo

MemTotal: 1188005584 kB

10. who -r

run-level 3 May 27 18:11

11. Systemd service manager version: systemd 252 (252-55.el9)

Default Target	Status
multi-user	running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online accounts-daemon atd auditd avahi-daemon bluetooth chronyd crond cups dbus-broker firewalld gdm getty@ insights-client-boot irqbalance iscsi-onboot iscsi-starter kdump libstoragemgmt low-memory-monitor lvm2-monitor mcelog mdmonitor microcode multipathd nis-domainname nvme-fc-boot-connections ostree-remount qemu-guest-agent rshmcertd rsyslog rtkit-daemon selinux-autorelabel-mark smartd sshd sssd switcheroo-control systemd-boot-update systemd-network-generator systemd-pstore tuned udisks2 upower vgauthd vmtoolsd
enabled-runtime	systemd-remount-fs
disabled	arp-ethers blk-availability brltty canberra-system-bootup canberra-system-shutdown canberra-system-shutdown-reboot chrony-wait chronyd-restricted cni-dhcp console-getty cpupower cups-browsed dbus-daemon debug-shell dnf-system-upgrade dnsmasq iprdump iprinit iprupdate iscsi-init iscsid iscsiui0 kpatch kvm_stat ledmon lvm-devices-import man-db-restart-cache-update netavark-dhcp-proxy netavark-firewalld-reload nftables nvme-autoconnect ostree-readonly-sysroot-migration ostree-state-overlay@ podman podman-auto-update podman-clean-transient podman-kube@ podman-restart psacct ras-mc-ctl

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Platform Notes (Continued)

```
indirect
rasdaemon rdisc rhcd rhsm rhsm-facts rpmdb-rebuild selinux-check-proper-disable
serial-getty@ speech-dispatcherd sshd-keygen@ systemd-boot-check-no-failures
systemd-sysexct tuned-ppd wpa_supplicant
iscsi spice-vdagentd sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh sssd-sudo
systemd-sysupdate systemd-sysupdate-reboot
```

```
-----
13. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=(hd0,gpt2)/vmlinuz-5.14.0-611.5.1.el9_7.x86_64
root=/dev/mapper/rhel_135--180--133-root
ro
resume=/dev/mapper/rhel_135--180--133-swap
rd.lvm.lv=rhel_135-180-133/root
rd.lvm.lv=rhel_135-180-133/swap
rhgb
quiet
crashkernel=1G-2G:192M,2G-64G:256M,64G-:512M
```

```
-----
14. cpupower frequency-info
analyzing CPU 173:
Unable to determine current policy
boost state support:
Supported: yes
Active: yes
```

```
-----
15. tuned-adm active
Current active profile: throughput-performance
```

```
-----
16. sysctl
kernel.numa_balancing 1
kernel.randomize_va_space 2
vm.compaction_proactiveness 20
vm.dirty_background_bytes 0
vm.dirty_background_ratio 10
vm.dirty_bytes 0
vm.dirty_expire_centisecs 3000
vm.dirty_ratio 40
vm.dirty_writeback_centisecs 500
vm.dirtytime_expire_seconds 43200
vm.extfrag_threshold 500
vm.min_unmapped_ratio 1
vm.nr_hugepages 0
vm.nr_hugepages_mempolicy 0
vm.nr_overcommit_hugepages 0
vm.swappiness 10
vm.watermark_boost_factor 15000
vm.watermark_scale_factor 10
vm.zone_reclaim_mode 0
```

```
-----
17. /sys/kernel/mm/transparent_hugepage
defrag always defer defer+madvice [madvice] never
enabled [always] madvice never
hpage_pmd_size 2097152
shmem_enabled always within_size advise [never] deny force
```

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```
18. /sys/kernel/mm/transparent_hugepage/khugepaged
alloc_sleep_millisecs 60000
defrag 1
max_ptes_none 511
max_ptes_shared 256
max_ptes_swap 64
pages_to_scan 4096
scan_sleep_millisecs 10000
```

```
19. OS release
From /etc/*-release /etc/*-version
os-release Red Hat Enterprise Linux 9.7 (Plow)
redhat-release Red Hat Enterprise Linux release 9.7 (Plow)
system-release Red Hat Enterprise Linux release 9.7 (Plow)
```

```
20. Disk information
SPEC is set to: /home/cpu2017
Filesystem Type Size Used Avail Use% Mounted on
/dev/mapper/rhel_135--180--133-home xfs 372G 43G 330G 12% /home
```

```
21. /sys/devices/virtual/dmi/id
Vendor: Supermicro
Product: Super Server
Product Family: Family
Serial: 0123456789
```

```
22. dmidecode
Additional information from dmidecode 3.6 follows. WARNING: Use caution when you interpret this section.
The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately
determined", but the intent may not be met, as there are frequent changes to hardware, firmware, and the
"DMTF SMBIOS" standard.
Memory:
12x SK Hynix HMC64AMBRB970N 96 GB 2 rank 8000
```

```
23. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor: American Megatrends International, LLC.
BIOS Version: 1.5b
BIOS Date: 05/04/2026
BIOS Revision: 5.35
```

Compiler Version Notes

```
=====  
C | 619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base, peak)  
=====
```

```
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2026.0.0 Build 20260331  
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.  
=====
```

```
=====  
C++, C, Fortran | 607.cactuBSSN_s(base, peak)  
=====
```

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Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.

Fortran | 603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak) 654.roms_s(base, peak)

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.

Fortran, C | 621.wrf_s(base, peak) 627.cam4_s(base, peak) 628.pop2_s(base, peak)

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2026.0.0 Build 20260331
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Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2026.0.0 Build 20260331
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Base Compiler Invocation

C benchmarks:
icx

Fortran benchmarks:
ifx

Benchmarks using both Fortran and C:
ifx icx

Benchmarks using Fortran, C, and C++:
icpx icx ifx

Base Portability Flags

603.bwaves_s: -DSPEC_LP64
607.cactuBSSN_s: -DSPEC_LP64
619.lbm_s: -DSPEC_LP64
621.wrf_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
627.cam4_s: -DSPEC_LP64 -DSPEC_CASE_FLAG
628.pop2_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
-assume byterecl
638.imagick_s: -DSPEC_LP64

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SPEC CPU®2017 Floating Point Speed Result

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Supermicro

SuperServer SYS-112HA-TN
(X14SBH-AP , Intel Xeon 6970E+)

SPECspeed®2017_fp_base = 390

SPECspeed®2017_fp_peak = 390

CPU2017 License: 001176
Test Sponsor: Supermicro
Tested by: Supermicro

Test Date: May-2026
Hardware Availability: Jun-2026
Software Availability: Apr-2026

Base Portability Flags (Continued)

644.nab_s: -DSPEC_LP64
649.fotonik3d_s: -DSPEC_LP64
654.roms_s: -DSPEC_LP64

Base Optimization Flags

C benchmarks:

```
-w -std=c11 -m64 -Wl,-z,muldefs -xclearwaterforest -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP -Wno-implicit-int
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Fortran benchmarks:

```
-w -m64 -Wl,-z,muldefs -DSPEC_OPENMP -xclearwaterforest -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using both Fortran and C:

```
-w -m64 -std=c11 -Wl,-z,muldefs -xclearwaterforest -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP -Wno-implicit-int
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using Fortran, C, and C++:

```
-w -std=c++14 -m64 -std=c11 -Wl,-z,muldefs -xclearwaterforest
-Ofast -ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP -Wno-implicit-int
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Peak Compiler Invocation

C benchmarks:

icx

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

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Peak Compiler Invocation (Continued)

Benchmarks using Fortran, C, and C++:
icpx icx ifx

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

619.lbm_s: basepeak = yes

638.imagick_s: basepeak = yes

644.nab_s: basepeak = yes

Fortran benchmarks:

603.bwaves_s: -w -m64 -Wl,-z,muldefs -DSPEC_OPENMP -xclearwaterforest
-Ofast -ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc

649.fotonik3d_s: basepeak = yes

654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:

621.wrf_s: basepeak = yes

627.cam4_s: -w -m64 -std=c11 -Wl,-z,muldefs -xclearwaterforest
-Ofast -ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP
-Wno-implicit-int -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc

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Peak Optimization Flags (Continued)

628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:

607.cactuBSSN_s: basepeak = yes

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2017/flags/Intel-ic2026-official-linux64.html>

<http://www.spec.org/cpu2017/flags/Supermicro-Platform-Settings-V1.2-CWF-revC.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2017/flags/Intel-ic2026-official-linux64.xml>

<http://www.spec.org/cpu2017/flags/Supermicro-Platform-Settings-V1.2-CWF-revC.xml>

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Tested with SPEC CPU®2017 v1.1.9 on 2026-05-28 01:39:46-0400.
Report generated on 2026-06-16 17:50:14 by CPU2017 PDF formatter v6716.
Originally published on 2026-06-16.